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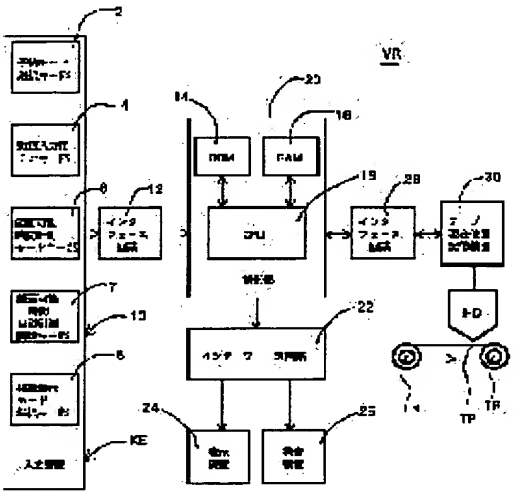
(54) SIGNAL RECORDER

(57)Abstract:
PROBLEM TO BE SOLVED: To enhance operation convenience for the user by enabling timer reservation without making a user always care about the remaining recordable quantity of a recording medium.
SOLUTION: At the time of performing such an operation that a present position of a tape TP is detected, and a signal is recorded from the detected present position to a recording finishing position in a prescribed mode, a recordable time capable of actually recording a signal is measured by this video tape recorder VR. Then, the measured time is compared with a reserved time by a CPU 18, and as a result of this comparison, if the reservation time is longer, an alarm is given by an alarm device 26.



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Subsequently explained with reference to Fig. 3 are a process at the time of finishing the recording and a process for alarming the insufficiency of the remaining amount during the timer reservation. This flowchart is executed every time the recording process (signal of a predetermined unit) for one program that is subject to a timer reservation is finished. Firstly, the CPU 18 determines whether the present mode is an alarm mode for indicating the insufficiency in the remaining amount of the tape or not (P1). In case where it is not the alarm mode for the insufficiency in the remaining amount of the tape (P1: NO), i.e., in case where the selection key 8a is arranged at the position of "no warning 8c" of the remaining amount, the program escapes from the flowchart shown in Fig. 3 and is ended. Further, in case where the CPU 18 determines that it is the alarm mode (P1: YES), i.e., in case where the selection key 8a is arranged at the position of "warning 8d" of the remaining amount, the tape running counter that stores the total recording time is read out (P2).

[0024]

Then, the CPU 18 subtracts the time required for the recording process (signal of a predetermined unit) for one program from the counter value read from the RAM 16, i.e., from

the set or measured recordable time (P3). Since the result of the subtraction is also the remaining amount of time of the tape, the CPU 18 stores the result of the subtraction in the RAM 16 as a remaining amount of time of the tape (P4). Thereafter, the CPU 18 calculates the total recording time of the whole timer reservation from the start time and the end time of each timer reservation that is currently reserved (P5). Then, the CPU 18 stores the result of the total recording time in the RAM 16 (P6). The CPU 18 serving as comparing means compares the total reserved recording time and the remaining amount of the tape so as to determine whether the remaining amount of the tape is small or not (P7).

[0025]

When the remaining amount of the tape is smaller than the total recording time (P7: YES), all of the reserved programs cannot be recorded in the remaining amount of the tape TP, so that the alarm process is executed (P8). In this alarm process, an alarm sound may be given or a flash display may be carried out. On the other hand, the remaining amount of the tape is greater than the total recording time (P7: NO), all of the reserved programs can totally be recorded without a failure in the recording by the timer reservation, so that the program is ended. As described above, the alarm process is performed every time one reserved recording is finished, whereby the alarm can be given with the reservation set. Therefore, a user can repeatedly

perform recording without concern for whether the remaining amount of the tape is great or small.

Fig. 3

① Start

② Alarm mode for insufficiency in remaining amount of tape?

③ Reading out tape running counter (total recording time)

④ Subtracting from recordable time

⑤ Storing result of subtraction as remaining amount of time of tape

⑥ Calculating total recording time of timer reservation

⑦ Storing result as total reservation time

⑧ Is remaining amount of time of tape smaller than total reservation time?

⑨ Alarm process

⑩ End